AMENDMENTS TO THE DRAWINGS:

Attached are five (5) replacement sheets that include changes to FIGS. 6-7 and 9-11. These sheets each add a "X" axis legend of "Sample Number" to their corresponding graph.

Attachment: Five (5) Replacement Sheets

REMARKS

This is a full and timely response to the non-final Office action mailed March 8, 2005. Reexamination and reconsideration in view of the foregoing amendments and following remarks is respectfully solicited.

Objections to Specification

In the office action, the Examiner objected to the disclosure for various informalities. In particular, the Examiner objected to the specification at page 6, line 4, stating that it appears that -are-should be inserted after -and-. Accordingly, applicants have amended paragraph [0028] above as suggested by the Examiner.

The Examiner also objected to the specification at page 10, line 22, stating that there appears to be a word missing after -to-. Accordingly, applicants have amended paragraph [0043] above to add the word "be" after -to-.

Objections to Drawings

In the office action, the Examiner objected to the drawings, stating that FIGS. 6-7 and 9-11 do not contain units for the "X" and "Y" axis. Likewise, the Examiner objected to FIGS. 5, 8 and 12, stating that they do contain units for the "Y" axis.

In response, applicants have provided replacement sheets for FIGS. 6-7 and 9-11, adding "Sample Number" as a legend for the "X" axis. However, applicants have not added a "Y" axis legend to these FIGS, or to FIGS. 5, 8 and 12. Applicants submit that not having a "Y" axis legend designating units is proper for several reasons. First, as described in the specification, these graphs are simply designed to illustrate an exemplary data trend, and thus could comprise data from a variety of different sensors. Second, in many cases the data would be unit less. For example, in cases where the data is normalized before trending, the data in the "Y" axis would not have any units to designate.

Thus, applicants submit that the replacement drawings for FIGS. 6-7 and 9-11 overcome the Examiner's objections to the drawings, and that the objections should be withdrawn.

Rejections Under 35 U.S.C. § 112

In the office action, the Examiner rejected claim 21 under 35 U.S.C. § 112, stating that the limitation "the mechanical system" in line 4 was without sufficient antecedent basis. Accordingly, applicants have amended claim 21 to correct the insufficient antecedent basis.

Rejections Under 35 U.S.C. § 103

Claims 1, 11, 21, 22, 23 and 33 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Adibhatla et al (U.S. Patent No 6,532,412) in view of de la Vega et al (Efficient Computation of Locally Monotonic Regression. The Examiner then stated that claims 2-10, 12-20, 24-32 and 34-42 would be allowable if rewritten in independent from, including all the limitations of the base claim and any intervening claims.

Accordingly, applicants have amended independent claims 1, 11, 21 and 33 to include the limitations of claims 3, 13, 25, and 35 respectively. Specifically, amended independent claim 1 now includes the limitations of original claim 3, and thus effectively corresponds to claim 3 in independent form. Likewise, amended independent claim 11, now includes the limitations of original claim 13, and thus effectively corresponds to claim 13 in independent form. Likewise, amended independent claim 21 now includes the limitations of original claim 25, and thus effectively corresponds to claim 25 in independent form. Finally, amended independent claim 33 now includes the limitations of original claim 35, and thus effectively corresponds to claim 35 in independent form.

Thus, amended independent claims 1, 11, 21 and 33 are now allowable over the cited references. Furthermore, as claims 2 and 4-10 depend from, and include all the limitations of amended independent claim 1, they are also submitted to be allowable.

Furthermore, as claims 12 and 4-20 depend from, and include all the limitations of amended independent claim 11, they are also submitted to be allowable. Furthermore, as claims 22-24 and 26-32 depend from, and include all the limitations of amended independent claim 21, they are also submitted to be allowable. Finally, as claims 34 and 36-42 depend from, and include all the limitations of amended independent claim 33, they are also submitted to be allowable. Claims 3, 13, 25 and 34 have been cancelled.

In summary, and in view of the amendments herein, none of the references cited by the Examiner nor any other known prior art, either alone or in combination, disclose the unique combination of features disclosed in applicant's claims presently on file. For this reason, allowance of all of applicant's claims is respectfully solicited.

Conclusion

Applicants submit that the present application is in condition for allowance.

Favorable reconsideration and withdrawal of the objections and rejections set forth in the above-noted Office Action, and an early Notice of Allowance are requested.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number. If for some reason Applicant has not paid a sufficient fee for this response, please consider this as authorization to charge Ingrassia, Fisher & Lorenz, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

INGRASSIA FISHER & LORENZ

Dated: 500 2005

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